

REMARKS

The Office Action of September 13, 2004 has been carefully considered. In response thereto, the claims have been amended as set forth above. Reconsideration and allowance in view of the foregoing amendments and the following remarks is respectfully requested.

The objection to the drawing is noted. REPLACEMENT SHEETS are submitted herewith.

The claims were rejected/objection to by reason of various informalities. These have been addressed by the present amendment. In relation to claim 4, the claim is correct as previously presented. In this case, two insertions happen in sequence. Initially as a result of an (external) interrupt signal, pipeline stages are flushed and instruction B (the interrupt call) is inserted in the pipeline. This interrupt call then in turn causes instruction A to be inserted.

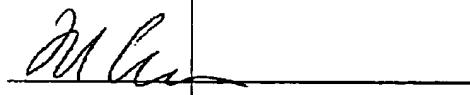
Claims 1-7, 11 and 12 were rejected as being anticipated by Brown. Claims 8-10 and 13 were rejected as being unpatentable over Brown in view of Miller. The claims have been amended to more clearly distinguish over the cited references. Reconsideration is respectfully requested.

In particular, the claims have been amended to recite causing multiple pipeline stages to become available by performing a pipeline flush in response to detecting a disruption of the progress of an instruction through the pipeline. The results of the pipeline flush are illustrated in Figure 5, for example, in which the multiple stages caused to be available by performing a pipeline flush are indicated by cross-hatching.

Brown, on the other hand, describes pre-insertion, in which addition instructions are inserted in advance of a detected instruction, and post-insertion, in which additional instructions are inserted following a detected instruction. Brown is not believed to teach or suggest causing multiple pipeline stages to become available by performing a pipeline flush in response to detecting a disruption of the progress of an instruction through the pipeline as presently claimed.

Withdrawal of the rejection and allowance of claims 1-12 is respectfully requested.

Respectfully submitted,

  
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Dated: February 14, 2005